The SurveyorVFT Pressurized Camera Dome housing has all the features and functions of the SurveyorVFT Camera Dome System. The interior is pressurized with dry nitrogen gas and regulated with a relief valve. In addition, the interior is environmentally controlled using a thermostatically-controlled heater/fan assembly. This environment is characterized as ideal (IP67 rated) and provides the maximum protection against the elements that would normally cause rapid deterioration of electronic and video components. The exterior is UV resistant polyethylene plastic. The lower dome is fabricated from distortion-free clear acrylic plastic. Refer to Table 1 for models.

There is a wall mount and pipe adapter available for mounting the pressurized housing.

Vicon strongly recommends the use of uninterruptible power supply systems (UPS) to prevent voltage fluctuations that can affect operation, cause video loss and damage to the equipment.

SURVEYORVFT Pressurized Camera Dome Housing

- **Sealed and pressurized housing offers maximum environmental protection**
- **Provides environmental control for SurveyorVFT Camera Dome**
- **Pendant or wall mount available**
- **Versions available with color 22X or day/night 23X**
- **Prefabricated multi-conductor cable assembly available**
- **Compatible with all Vicon matrix systems**
- **Low pressure sensor alarm output**
- **Daisy chain connectivity with full duplex capability**

ASSOCIATED EQUIPMENT AND ACCESSORIES

Model SVFT-PR-WM Wall Mount, Product Code 8381: Used to easily mount the pressurized housing to a horizontal surface for an indoor or outdoor application. A convenient access door allows installation and servicing. Refer to Product Specification 144.

Model SVFT-PR-P Pipe Adapter, Product Code 8382: Used to easily mount the pressurized housing to various SurveyorVFT mounts or a vertically oriented 1-1⁄2 inch NPT schedule 40 pipe. Refer to Product Specification 144.

Model S2-PR-CBL-12A Pre-Wired Cable, Product Code 8073: Prefabricated cable for all connections.

Model Number	Product Code	Camera Type/ Format	Optical Zoom/ Total Zoom
SVFT-PR22	8710	Color/ NTSC with ExView Technology	22x/264x
SVFT-PR22C	8710-01	Color/PAL with ExView Technology	22x/264x
SVFT-PR23	8711	Color/NTSC (day/night)	23x/276x
SVFT-PR23C	8711-01	Color/PAL (day/night)	23x/276x

For the ViconNet (V) option, add –20 to the product code; for Fiber Optic option, add –30 to the product code; for UTP (T) option, add –40 to the product code.

Table 1: SurveyorVFT Pressurized Model Versions

Model Number	Product Code	Description
V212-NVT	7631	Receiver, converts UTP video to composite up to 500 ft from transmitter
V213-NVT	6518	Receiver, converts UTP video to composite up to 1000 ft from transmitter
V652R-NVT	7453	Receiver, converts UTP video to composite up to 3000 ft from transmitter (does not support Vicoax systems)
V1613-NVT	7648	16-Channel Hub Receiver, converts UTP video to composite up to 1000 ft from each transmitter
V1662-NVT	6519	16-Channel Hub Receiver, converts UTP video to composite up to 3000 ft from each transmitter (does not support Vicoax systems)

Table 1 (cont'd): UTP Receiver Options

Model Number	Product Code	Description
VF-1400R	8421-00	Receiver, for SurveyorVFT transmission, simplex video and duplexRS-422 data
VF-1400RR	8421-02	Receiver, for SurveyorVFT transmission, simplex video and duplexRS-422 data
VF-SR-20/2	8423-00	Card cage with power supply

Table 1 (cont'd): Fiber Optic Receiver Options

Model Number	Product Code	Description
S28WPS	7030	28 VAC output, 4 amps, for outdoor SurveyorVFT Camera Domes
S28PS-HD	7862	Heavy-duty single-channel for SurveyorVFT pressurized and outdoor impact-resistant camera domes

Table 1 (cont'd): Power Supplies

TECHNICAL SPECIFICATIONS **SECURITY SYSTEM**
DIVISION 13 - SPECIAL CONSTRUCTION
SECTION 137_ _ - SECURITY CCTV SYSTEM

PART 2 - PRODUCTS

2.01 GENERAL

A. All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.

B. All systems and components shall have been thoroughly tested and proven in actual use.

C. All systems and components shall be provided with the availability of a toll free 24-hour technical support phone number from the manufacturer. The phone number shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge.

D. All systems and components shall be provided with an explicit manufacturer warranty.

2.02 CAMERA DOME PRESSURIZED HOUSING

A. The pressurized dome shall be an alternate mounting configuration for a camera dome. It shall be a completely self-enclosed, sealed housing in a pressurized dry nitrogen gas environment. It shall be IP67 rated and provide an ideal climate for the camera dome with respect to temperature, humidity and water and dust ingress.

B. The housing shall have two (2) mounting configurations, wall mount and 1-1⁄2 inch NPT schedule 40 pipe thread mount. The trim ring/lower dome assembly shall be attached to the housing with a safety cord.

C. The pressurized housing shall use a mechanical method to ensure its seal. The seal method shall be a bolt compressed neoprene O-ring.

D. The enclosure shall be backfilled with dry nitrogen gas to 5 psi nominal. A relief valve shall provide gas release at 7 psi and a normally open (NO) low-pressure switch shall close when the pressure falls to 1 psi nominal. The scheme shall meet a leak rate not to exceed 2.0 psi per year. This scheme shall also meet standard IP67 for full protection of components due to water and dust ingress.

E. The pressurized dome shall utilize a 23-pin pressure-rated connector to bring all signals from the interior to the exterior including power, video, communication, alarms and relays. It shall provide full performance of the camera dome. The pressurized dome shall provide electrical surge protection. Surge protection shall be provided on the video and power connector.

F. The camera dome shall have the following mechanical specifications:

1. Dimensions: Housing Diameter: 13.0-in. (333 mm); Dome Diameter: 9.8 in. (249 mm). Total Height: 14.0-in. (355 mm); Housing Height: 8.25 in. (210 mm).
2. Weight: 12.0 lb (5.4 kg); 16.5 lb (7.5 kg) with camera drive.
3. Construction: Housing: Lightweight aluminum with a UV resistant polyethylene plastic exterior sunshield.
   Dome: Distortion-free clear acrylic plastic.
4. Color: White sunshield, black housing and trim ring, clear dome

G. Ambient temperature and humidity shall be: -30 to 165° F (-34 to 74° C) in accordance with NEMA 2.1.5.1 STD2, -40 to 132° F (-40 to 55° C) continuous rotation; up to 100% relative, condensing. Maintained temperature and humidity range shall be: 14 to 140° F (-10 to 60° C); up to 90% relative, noncondensing.

2.0.3 COMPACT CAMERA DOME SYSTEM

A. The motorized dome shall have internal CPU-circuitry and provision for external programming via standard RS-422/485 protocol or enhanced VicoaxII protocol. Options for TCP/IP, fiber optic and twisted pair (UTP) video transmission shall be available. This circuitry shall provide for an external power supply input, four alarm inputs, one relay output and communications wiring.

B. Alarm inputs shall be individually programmable for their functional state (enabled or disabled), reporting state (report on or off), active state (high or low), acknowledge mode (manual, momentary or automatic), automatic acknowledge dwell time control, set and reset action (action when triggered or reset) and displayed title text. The relay output shall be programmable for its power-on state (on or off), output type (momentary or latching) and displayed title text.

C. Programmable titling shall be provided for the camera and every preset position, alarm, relay, and sector. Titles shall be enabled or disabled individually or globally. The overall position of the titles and display frame position shall be programmable. The capability to fade titles after a programmable time shall be provided.

D. There shall be 79 programmable preset positions available, each having a variable preset solve speed of 1 sec (nominal) and accuracy of 0.23°. The dome's 360 degree view shall be programmable for a maximum of 16 sectors. Each sector shall have the capability to be blanked out (no video display). The number and size of sectors shall be programmable and have a custom title.

E. There shall be eight tours available with 32 steps per tour. Tour steps shall include preset positions with speed control, relay control, alarm acknowledge, save/recall camera status, repeat tour, call another tour, call an autotour and dwell timing control. There shall be two autotours available with 256 pan, tilt and zoom functions per autotour. Timing shall be dynamic or as is actually programmed with the joystick and push buttons.

F. Pan and tilt functions shall be externally controlled, continuously variable and programmable to be enabled or disabled manual pan limits shall be programmable. There shall be an autopan feature and it shall be programmable for its functional settings (enabled, disabled speed, limits). Maximum manual pan and tilt speeds shall be programmable. Maximum pan speed shall be 360 degrees/sec and maximum tilt speed shall be 150 degrees/sec. Pan and tilt speeds shall also be scalable to the zoom setting. The zoom function speed shall be externally controlled using three settings, low, medium and high.

G. There shall be two camera/lens formats available, 22X and 23X (day/night). The camera-lens module shall be a 1/4 inch, high-resolution color type (the 22X with ExView™ technology). Camera sensitivity shall be between 0.0019 fc (0.02 lux) to 0.002 fc (0.03 lux), depending on the model for 23X and 22X respectively. The lens on the standard cameras shall have a maximum optical zoom setting of 22X and a maximum digital zoom setting of 12X for a total zoom setting of 264X and the lens on the day/night cameras shall have a maximum optical zoom setting of 23X and a maximum digital zoom setting of 12X for a total zoom setting of 276. Lens focal length shall be 4-88 mm with a maximum aperture of f/1.6 for the standard cameras and 3.6-82.8 mm for the day/night cameras with a maximum aperture of f/1.6. The digital zoom shall be programmable for its functional setting (enable/disable). An autoiris function with a manual override feature and an auto-focus function with functional setting control (enable/disable) shall also be provided.

H. In addition, the camera shall provide high level, programmable functions. The autoiris and AGC shall be adjustable. The shutter speed shall be automatic or manual. The automatic shutter speed shall work with an auto exposure feature. This feature can be set to operate with a fully automatic shutter speed or a fixed, selectable, linear speed. These features are called exposure priority or shutter priority. All color cameras shall have white balance gain using red and blue scales. Backlight compensation shall be programmable for its relative setting using a tuning value scale. Video line locking shall be provided with an internal crystal clock or a programmable vertical phase scale.

I. A real time clock and scheduler shall be available on all models. Up to 64 events shall be able to be scheduled for action at a programmed time of day. Events that may be scheduled include a preset, turning a relay on or off, enabling or disabling an alarm, and calling a tour or an autotour

J. 16 individual zoom-scalable programmable privacy masks shall be available.

K. Programmable azimuth and compass display shall be available. The compass shall be programmed for absolute North and shall display 8 compass headings (N, NE, E, SE, S, SW, W, NW). Pan and tilt degrees shall be displayed with a 1° resolution.

L. Motion detection capability shall be available for the day/night camera. For each preset, there are 6 programmable zones for motion detection. Each zone has 3 sensitivity levels. Programmable actions may be associated with each detection zone, including calling another preset, turning a relay on or off, and calling a tour or an autotour.

M. The capability to freeze an image during a preset solve shall be available on the day/night cameras. The control shall be global and affect all preset solves. The freeze of an image during solve has advantages when recording using a motion compensated recording system (DVR).

N. The capability to flip (invert) the video image shall be available on the day/night cameras. This feature is useful when mounting units in an inverted position. All pan/tilt and compass displays are automatically adjusted for the inverted image.

O. Auto Baud detection shall be provided on all models operating in RS-422/RS-485 communication mode. Baud rates supported shall be 4800, 9600 and 19,200 bps. All units shall have automatic detection and correction of the receive polarity (commands into the dome). The polarity of the transmit signals (responses from the dome) shall be programmable.

P. Absolute position control shall be provided on all models operating in RS-422/RS-485 communication mode. Pan and tilt direct control resolution shall be to 0.125 degrees and zoom direct control resolution shall be 0.125X magnitude. The capability to adjust the target iris level shall be provided using the absolute position control feature.

Q. All models shall support interfacing to selected competitors' control systems. Selection of available competitors' protocols shall be provided via DIP switch settings on the unit.

R. NTCIP 1103 compliant models shall be available (National Transportation Communications for ITS Protocol).

S. Multilanguage menu system shall be provided, including English, Spanish, French and Italian.

The pressurized camera dome system shall be Vicon Industries SurveyorVFT pressurized models. Refer to Table 1.

ELECTRICAL
(Pressurized Housing Only)

Input Voltage: 18-32 VAC, 50/60 Hz nominal.

Current: 3.1 A.
4.5 A with SurveyorVFT (coax, UTP, fiber); 4.9 A (ViconNet).

Power Consumption: 73 W.
106.6 W with SurveyorVFT (coax, UTP, fiber); 116.2 W (ViconNet).

Heat Equivalent: 4.15 btu/min (1.05 kg-cal/min).
6.1 btu/min (1.5 kg-cal/min) with SurveyorVFT (coax, UTP, fiber); 6.6 btu/min (1.67 kg-cal/min) (ViconNet).
Note: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

Maximum Power Cable Distance: See Table 2.

Connector Type: 23-pin, circular, pressure rated. Mating connector included for access to all SurveyorVFT signals including heater/blower, power, communications and video.
Fiber: ST connector.
ViconNet: RJ-45 connector.

Heater Power: 70 W. Will be capable of a cold-start de-icing of the lower dome.

Fan Cooling Rate: 16 cfm (126 ccm).

Fuse: 5 x 20 mm, 4 A 250 VAC, slo-blo. Surveyor2000 has separate internal fuses.

Radio Frequency Emission Rating: FCC Class A

MECHANICAL

Application: Indoor or outdoor.

Mounting: Wall mounting with SVFT-PR-WM Wall Mount or pendant mounting with SVFT-PR-P Pipe Mount.

Seal Type: 1 "O" ring, fabricated from neoprene, 0.139 in. (3.5 mm) cord diameter and an EPDM (rubber) gasket.

Table 2: Maximum Power Cable Distance

Wire Size (AWG) Annealed Copper Wire	Distance ft (m)			
	24 VAC		28 VAC	
	Coax, Fiber, UTP	ViconNet	Coax, Fiber, UTP	ViconNet
20	65 (20)	50 (15)	110 (34)	100 (30)
18	101 (31)	84 (25)	172 (52)	156 (48)
16	163 (50)	150 (46)	275 (84)	250 (76)
14	260 (79)	240 (73)	440 (134)	400 (122)
12	406 (124)	375 (114)	688 (210)	625 (190)

Mount Size/Thread:	4 threaded hole pattern (3.75 in./ 95 mm square) on top used for mount attachment. Each threaded hole is 1/4-20 x 0.41 in. (10 mm) deep. Gasket provided to seal top interface.
Dimensions:	See Figure. Pendant Housing Diameter (D1): 13.0 in. (330 mm). Dome Diameter (D2): 9.8 in. (249 mm). Housing Diameter (H1): 8.25 in. (210 mm). Total Height (H2): 14.0 in. (355 mm).
Weight:	12.0 lb (5.4 kg). 16.5 lb (7.5 kg) with SurveyorVFT included.
Construction:	Plastic, aluminum and stainless steel.
Color:	White housing, black housing and trim ring.
IP Rating:	IP67.
Shipping Dimensions:	Height: 19.5 in (495 mm). Width: 16 in. (406 mm). Depth: 16 in. (406 mm).
Shipping Weight:	18.5 lb (8.4 kg).
Shipping Volume:	2.9 ft^3 (0.08 m^3).

OPERATIONAL

Pressurization:	Schraeder type valve used to fill and drain housing with dry nitrogen gas. Relief valve automatically relieves pressure at 7 psi (0.48 atm).
Operating Pressure:	1 - 5 psi (0.07 - 0.34 atm or bars) maximum.
Relief Pressure:	7 psi (0.48 atm or bars) maximum.
Low Pressure Switch:	A normally open (NO) switch output available on connector for use as external alarm.
Surge Protection:	Video level is clamped at 6.5 V maximum. Power is current limited by a 1-watt in-line resistor.

ENVIRONMENTAL

Ambient Temperature and Humidity Range:	-30° F (-34° C) to 165° F (74° C) in accordance with NEMA 2.1.5.1 STD2; -40 to 132°F (-40 to 55°C) continuous rotation. Up to 100% relative humidity, condensing.
Maintained Temperature and Humidity Range:	14° F (-10° C) to 140° F (60° C) maximum. Up to 90% relative, noncondensing.

ELECTRICAL

(SurveyorVFT Drive Mechanism Only)

Drive Type:	Electrical motorized pan and tilt with electronic control.
Camera Types:	Units available in color and day/night (NTSC/PAL) formats and a variety of zoom and feature capabilities.
Input Voltage:	18-32 VAC.
Standard Connector Types:	Video Out: See version type. Power: 2-position removable screw terminal block. Control Input/Output: See version type. Relay Output: See version type. Alarm Input: 8-position removable screw terminal block.
Video Output Impedance:	75 ohms.
Fuse:	F1: 2AG, 1.6 A 250 VAC slo-blo. F2: 2AG, 2.5 A 250 VAC slo-blo.
Radio Emission Rating:	FCC Class A.

OPERATIONAL

Video Pan View:	360°.
Video Tilt View:	-2.5° (-2.5° above horizon) to 92.5° (-2.5° past vertical).
Pan Speed:	Variable, 0.1 to 360°/sec.
Autopan Speed:	Variable, 0.1 to 42°/sec; enable/disable.
Tilt Speed:	Variable, 0.2 to 150°/sec.
Zoom and Focus Speed:	Less than 1.8 sec from end to end.
Sectoring:	16 max, programmable for size and titling; capability to be blanked out.
Preset Capabilities:	79 individual programmable preset positions.
Preset Solving Speed:	1 sec nominal.
Preset Accuracy (Pan & Tilt):	0.23° maximum.
Tour Capabilities:	8 tours available. 32 programmable events per tour. Events may be preset positions with speed control, alarm acknowledge, dwelltime control, relay control, call autotours, tour repeat or another tour, save/recall camera status.

Autotour Capabilities: 2 autotours available with 256 pan, tilt and zoom functions per autotour. Programming is done in real time with joystick and push buttons.

Alarm Capabilities: 4 alarm inputs, individually programmable.
Functional state enable/disable.
Report state (report on/off).
Active state (high/low).
Mode (manual, momentary or automatic) with programmable dwell time control.
Set and reset action (preset solve, relay on/off, tour, autotour.
Alarm titling.

Relay Output Capabilities: 1 relay output.
Power-on state definition (on/off).
Output type definition (momentary or latching).
Relay function status titling.
Resistive Load: 0.3A @125 VAC; 1.5A @30 VDC.
Inductive Load: 0.15A @ 125 VAC; 0.75A @ 30 VDC.

Control Display: On-screen, menu-driven system allowing full configuration of the dome.

Privacy Masks: 16 individual, programmable, zoom-scalable.

Screen Titling Capabilities: Programmable for camera, preset, sector, relay and alarms.
Camera: 1 for each.
Preset: 79 maximum.
Sector: 16 maximum.
Alarm: 4 maximum.
Individual type date and time enable/disable; 20 characters maximum.
Selectable position.
Three text sizes for top 2 lines.
Fade capability.
Compass/azimuth, 8 compass headings (N, NE, E, SE, S, SW, W, NW).

Scheduling: Real time clock allows scheduling of up to 64 events, including presets, relays, alarms, tours or autotours.

Multilanguage Menu: English, Spanish, French and Italian.

Day/Night (23X) Features: 6 programmable motion detection zones with 3 sensitivity levels; image freeze during preset solve; flip (invert) video image.

Auto Baud: Auto baud detection in RS-22/RS-485 mode; 4800, 9600, 19,200 bps baud rates supported.

Absolute Position Control: Available in RS-422/RS-485 mode.
Pan/tilt: 0.125°; zoom: 0.125X.

Competitive Protocols: DIP switch selectable.

COAXIAL/UTP VERSIONS

Control Protocol Hardware: **Vicon**: Vicon's NOVA V1422 Matrix Switcher, V1300, V1344, V1466, V1400 and 1500 series NOVA CPUs, V1400X-DVC System Console and V1300X-RVC desk-top keypad or V1300X-RVC rack-mounted keypad.

Control Protocol Software: Vicon's ProTech software (or compatible) or Surveyor Direct Control program runs on a standard PC type computer with an RS-422/485 half duplex protocol interface.

Control Protocol Format (selectable via DIP switch 2): **Vicon:** RS-422 or RS-485 protocol. Communication is simplex or half duplex operation at 4800, 9600 or 19,200 baud or Vicon's enhanced VicoaxII protocol (superimposed data on composite video signal) automatically detected upon power up.
RS-485 protocol utilizes full tri-state outputs for daisy chain capability.
Pelco: Pelco D Protocol (3/2/99); RS-485 N.8.1, simplex 2400 bps, duplex 4800 bps.
Sensormatic/AD: RS-422/RS-485 communication protocols user's guide Rev. A (csd 05/00); RS-422/RS-485 duplex N.8.1 4800 bps. May require RS-422 converter, RCSN422.
Ultrak: (Released in future.) KD6, KD6-Z control protocols; RS-485 simplex E.8.1, 9600 bps.
Philips: (Released in future.) Receiver/Driver/Auto Dome control code protocol; RS-232 simplex N.8.1, 2400 or 9600 bps.

Kalatel: (Released in future.) Non-repeating transmit commands; RS-422 simplex N.8.1, 9600 bps.
Cohu: (Released in future.) MPC System RS-422 interface; RS-422 duplex N.8.1, 9600 bps.
Panasonic: (Released in future.) Panasonic conventional and new camera protocol.
Note: All companies make changes and improvements in their products. Because this product can interface with equipment not manufactured by Vicon, there is a possibility that the interface protocols may have changed since Vicon tested this product with the interfacing equipment. Vicon recommends purchasing a single unit for bench testing prior to purchasing and installing this product in quantity.

Connector Types: **Video Out:**
Coax: BNC-F.
UTP: 3-position removable screw terminal block.
Control Input/Output:
8-position removable screw terminal block.
Relay Output: 8-position removable screw terminal block.

FIBER-OPTIC VERSION

Fiber Optic Receiver Specs: **Video:**
I/O Level: 1 V p-p.
I/O Impedance: 75 ohms.
Bandwidth: 8 MHz.
Differential Gain: 5%.
Differential Phase: 5°.
SNR: 60dB.
Data:
Data Rate: Up to 19.2 Kbps.
Optical:
Wavelength: 850/1300 nm.
Loss Budget (62.5/125u): 12 dB.
Connector: ST.

Connector Types: **Video Out:** ST type.
Control Input/Output: ST type.
Relay Output: 8-position removable screw terminal block.

VICONNET VERSION (LAN/TCP/IP)

Communication Protocol Hardware: Vicon's Kollector Elite Digital Recorders and ViconNet Workstations.

LAN Interface: 100 Mbps.

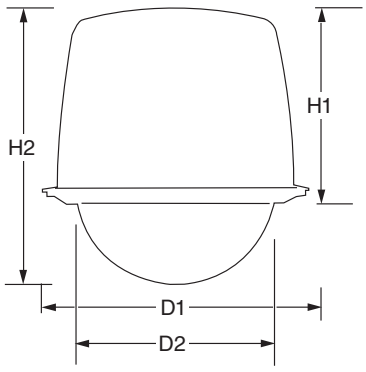
Connector Types: Video Out: RJ-45 jack.
Network: Ethernet 100Base-T RJ-45 jack. 10/100 Mbps required for network connection.
Audio Input/Output: RCA jacks.
Relay Output: 3-position removable screw terminal block.

CAMERA/LENS

Specifications: Refer to Table 2.

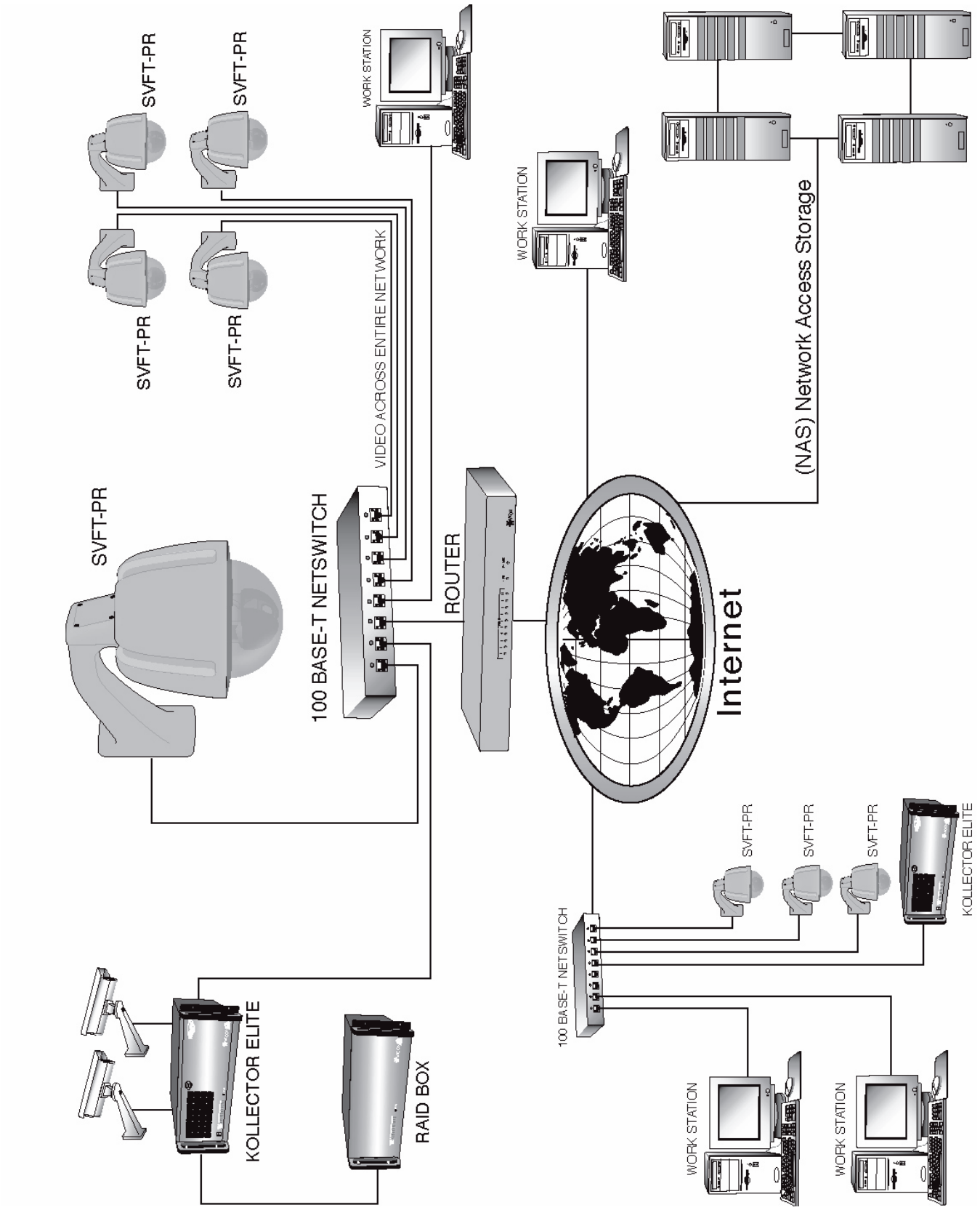
VIDEO TRANSMISSION

Maximum Distances: Coax: 1100 ft (350 m), cable dependant.
Vicoax: 1500 ft up to 140° F (60° C); 1000 ft up to 165° F (74° C). RG59.
UTP: up to 3000 ft (915 m), model dependant.
Fiber: 1 mile min.; longer distances available dependant on cable quality.
ViconNet: 100 meters without repeater.



Specifications	Model Numbers			
	SVFT-PR22	SVFT-PR22C	SVFT-PR23	SVFT-PR23C
	Product Codes			
	8710	8710-01	8711	8711-01
	Formats			
	NTSC	**PAL**	**NTSC**	**PAL**
Type	Color	Color	Color	Color
Optical Zoom	22X	22X	23X	23X
Digital Zoom	12X	12X	12X	12X
Total Zoom	264X	264X	276X	276X
Zoom Speed	Tele-Wide: 3.9 sec	Tele-Wide: 3.9 sec	Tele-Wide: 3.9 sec	Tele-Wide: 3.9 sec
Image Device	1/4-inch interline transfer CCD	1/4-inch interline transfer CCD	1/4-inch interline transfer CCD	1/4-inch interline transfer CCD
Picture Elements	768(H) x 494 (V), 380,000 pixels	752(H) x 582 (V), 438,000 pixels	768(H) x 494 (V), 380,000 pixels	847(H) x 532 (V), 490,000 pixels
Scanning System	2:1 interlace, 525 lines 60 fields/sec	2:1 interlace, 625 lines 50 fields/sec	2:1 interlace, 525 lines 60 fields/sec	2:1 interlace, 625 lines 50 fields/sec
Sensitivity	0.002 fc (0.03 lux) at 40 IRE, f/1.6, auto 1/4s	0.002 fc (0.03 lux) at 40 IRE, f/1.6, auto 1/3s	0.0019 fc (0.02 lux) at 40 IRE, f/1.6, auto 1/4s	0.0019 fc (0.02 lux) at 40 IRE, f/1.6, auto 1/5s
Horizontal Resolution	470 TV lines (color)	470 TV lines (color)	470 TV lines (color)	530 TV lines (color)
S/N Ratio	More than 50 dB	More than 50 dB	More than 50 dB	More than 50 dB
Synchronization	Internal/External (line lock on AC line)	Internal/External (line lock on AC line)	Internal/External (line lock on AC line)	Internal/External (line lock on AC line)
Automatic Gain Control (AGC)	Adjustable to 25 dB	Adjustable to 32 dB	Adjustable to 30 dB	Adjustable to 30 dB
Backlight Compensation	Software adjustable background video level	Software adjustable background video level	Software adjustable background video level	Software adjustable background video level
Iris Control	Automatic/Manual	Automatic/Manual	Automatic/Manual	Automatic/Manual
Video Focus	Automatic/Manual 1.0 m (tele) - 0.01 m (wide)	Automatic/Manual 1.0 m (tele) - 0.01 m (wide)	Automatic/Manual 1.0 m (tele) - 0.01 m (wide)	Automatic/Manual 1.0 m (tele) - 0.01 m (wide)
White Balance	Automatic/Manual Red/Blue Gain Level	Automatic/Manual Red/Blue Gain Level	Automatic/Manual Red/Blue Gain Level	Automatic/Manual Red/Blue Gain Level
Shutter Speed	Auto(DSS): 1/2-1/4000 Man:1/2-1/30K sec	Auto(DSS): 1/1.5-1/4000 Man:1/1.5-1/30K sec	Auto(DSS): 1/2-1/60 Man:1/2-1/30K sec	Auto(DSS): 1/1.5-1/50 Man:1/1.5-1/30K sec
Input Voltage	9.0 VDC ±0.5 V	9.0 VDC ±0.5 V	9.0 VDC ±0.5 V	9.0 VDC ±0.5 V
Power Consumption	3.3 W max	3.3 W max	3.6 W nom.	3.6 W nom.
Dimensions H x W x D	2.4 x 2.0 x 3.5 in. 60 x 50 x 88.9 mm	2.4 x 2.0 x 3.5 in. 60 x 50 x 88.9 mm	2.4 x 2.0 x 3.5 in. 60 x 50 x 88.9 mm	2.4 x 2.0 x 3.5 in. 60 x 50 x 88.9 mm
Weight	0.5 lb (0.23 kg)	0.5 lb (0.23 kg)	0.5 lb (0.23 kg)	0.5 lb (0.23 kg)
Lenses				
Focal Length	4 - 88 mm	4 - 88 mm	3.6 - 82.8 mm	3.6 - 82.8 mm
Aperture max	f/1.6	f/1.6	f/1.6	f/1.6
Horizontal Angle of View	47° wide, 2.2° tele	47° wide, 2.2° tele	47° wide, 2.2° tele	47° wide, 2.2° tele

Table 3: Camera/Lens Specifications



Copyright © 2004 Vicon Industries, Inc. All rights reserved
Vicon and its logo are registered trademarks of Vicon Industries, Inc.